

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A method for recording call failure information in a data transmission system, comprising:

generating a first failure log in response to a failure event, said first failure log including a failure type and a first timestamp and;

placing said first failure log in a queue;

formulating an identifier for said first failure log based on said failure type by inputting at least one field from said failure log into a formulation function, wherein said at least one field is selected based on said failure type; and

when no existing record in a log record storage includes said formulated identifier, creating a log record for said first failure log and storing said log record in a said log record storage, said log record including said formulated identifier.

2. (Currently Amended) The method of claim 1, wherein said log record comprises:

a timestamp field for storing said first timestamp, and

a count field for storing a count ~~indication~~ indicating the number of log records generated by said failure event.

3. (Currently Amended) The method of ~~claim 1~~ claim 2, further comprising:
generating a further failure log in response to said failure event, said further failure log including said failure type and a current timestamp;

~~formulating said an identifier for said further failure log based on said failure type by inputting at least one field from said further failure log into said formulation function, wherein said at least one field from said further failure log is selected based on said failure type; and~~

updating said log record in said log record storage to document said current timestamp.

4. (Original) The method of claim 3, further comprising incrementing said count by one to indicate the current number of failure logs with said identifier that have updated said log record.

5. (Canceled)

6. (Currently Amended) The method of ~~claim 5~~ claim 1, wherein, for an active call, ~~said selected fields~~ at least one field includes a standard failure reason field and a failure point field.

7. (Currently Amended) The method of ~~claim 5~~ claim 1, wherein, for a call attempt, ~~said selected fields~~ at least one field includes a standard failure reason field, ~~and a calling party identification field~~, and a called party identification field.

8. (Currently Amended) The method of ~~claim 5~~ claim 1, wherein ~~said selected fields~~ at least one field further includes a proprietary failure reason field.

9. (Currently Amended) The method of claim 1, wherein said step of formulating an identifier comprises applying a Cyclic Redundancy Check (CRC) ~~type CRC type-checksum function over selected fields to said at least one field in~~ said failure log.

10. (Original) The method of claim 2, further comprising using said count indication to complement the call failure statistics collected over said network.

11. (Currently Amended) The method of ~~claim 5~~ claim 1, wherein said step of formulating an identifier comprises:

selecting n fields in said failure log; and

selecting a function that provides a unique result when applied to a data configuration and applying ~~a~~ said selected function to the data ~~comprised~~ included in said n fields.

12. (Currently Amended) The method of claim 11, wherein said selected function is a Cyclic Redundancy Check (CRC) type CRC type-checksum function.

13. (Original) The method of claim 11, further comprising selecting said fields with a configurable filter.

14. (Currently Amended) The method of claim 5 claim 1, wherein said step of formulating an identifier comprises:

selecting n fields in said failure-log; log according to said failure type;

selecting a plurality of functions, a function for each said failure type, each function providing a unique result when applied to a data configuration; and

applying to the data-comprised contained in said n fields, a function corresponding to the failure type in said failure log.

15. (Currently Amended) A device for recording call failure information in a data transmission system, comprising:

means for generating a failure log in response to a failure event, said failure

log including a failure type and a time stamp;

a log queue for temporarily receiving said failure log;

means for formulating an identifier for said failure log, ~~wherein, based on a failure type of the event that generated said failure log~~ said means for formulating an identifier receive an input of at least one field from said failure log and said at least one field is selected based on said failure type;

means for creating a log record for said failure log ~~when no existing log record includes said identifier, which includes said log record including said identifier, and;~~
and

a log record storage for storing said log record.

16. (Original) The device of claim 15, further comprising means for updating said log record in said log record storage.

17. (Currently Amended) The device of claim 16, wherein said means for formulating comprises:

a log type block for providing a failure type indicating the type of event that generated said failure log;

a filter for selecting ~~a number of fields~~ said at least one field in said failure log; and

a formulation function unit for receiving said failure log, applying said formulation function to the data ~~comprised in said fields~~ contained in said at least one field, and providing a unique log ID ~~unique for said failure type~~.

18. (Original) The device of claim 17, wherein said filter is configurable.
19. (Currently Amended) The device of claim 15, wherein said means for formulating comprises:
- a log type block for providing a failure type indicating the type of event that generated said failure log;
 - a plurality of formulation function units, a unit for each said failure type, each unit for creating a log record with a unique identification;
 - a separator for receiving said failure log and directing ~~same~~ said failure log to a formulation function unit corresponding to said failure type; and
 - a combiner for directing said log record from the output of each said formulation function unit to said log record storage.